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GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER STACE, BRENT S	
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			2161	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/24/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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**Office Action Summary**

Application No.

10/628,211

Applicant(s)

BRADY ET AL.

Examiner

Brent S. Stace

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 9, 10, 15, 17, 18, 21-26 and 28-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 9, 10, 15, 17, 18, 21-26 and 28-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Remarks*

1. This communication is responsive to the amendment filed August 22<sup>nd</sup>, 2006. Claims 1-3, 9, 10, 15, 17, 18, 21-26, and 28-41 are pending. In the amendment filed August 22<sup>nd</sup>, 2006, Claims 1, 10, 18, and 25 are amended, Claims 4-8, 11-14, 16, 19, 20, and 27 are canceled, and Claims 1, 10, 18, and 25 are independent Claims. The examiner would like to note that Claim 15's status identifier of "currently amended" is incorrect. No amendment has been made to this claim and the status identifier should be "previously presented." This status identifier should be corrected in future correspondence(s) with the Office to recognize the claim's actual status. The examiner acknowledges that no new matter was introduced and the claims are supported by the specification.

### *Response to Arguments*

2. Applicant's arguments filed August 22<sup>nd</sup>, 2006 with respect to claims 1-3, 9, 10, 15, 17, 18 and 21-26 have been considered but are not persuasive.
3. As to the applicant's arguments with respect to Claim 1 for the prior art(s) allegedly not disclosing "the interexchange carrier uses the notification to decided whether to connect the suspended call to the called party," the examiner respectfully disagrees. The examiner would like to note that the "first format" and the "second format" of requests in the claims are not limited to being different formats. For

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examples, the claim does not specifically recite "wherein the first format is a different format from the second format." As such, the claim can and is being interpreted as the first and second requests being the same format (except for dependent Claims 35 and 36, however these are new dependent claims). The examiner also notes that a request in a computer/phone/database system must have at least a format of some kind in order to order the data for transmission (sending/receiving). Thus, even though the amendments do limit the claim only slightly, the cited sections of Akinpelu (Akinpelu, col. 2, lines 64-66 with Akinpelu, cols. 3-4, lines 50-5 with Akinpelu, col. 4, lines 45-59) still teach the limitations as claimed and the amended claims do not overcome the prior art.

4. As to the applicant's arguments with respect to Claim 1 for the prior art(s) allegedly not disclosing "the interexchange carrier uses the notification to decide whether to connect the suspended call to the called party," the examiner respectfully disagrees. Boughman, specifically col. 7, lines 10-14, teaches that a call may be automatically completed when the MSC is messaged/notified if/when the call is a non-toll call. The call must be completed by the MSC/interexchange since Boughman teaches that no user call notification/interaction/completion is done upon determining if the call is a non-toll call (as can also be seen in Boughman, Fig. 2). The limitations of the claim are taught by the prior art(s) as claimed.

Further, the applicant's argue that "Boughman ... is unrelated to identifying information of the identified local service provider of the caller and whether an agreement exists between the identified local service provider and the interexchange

carrier.” The examiner notes that, whether this is true or not, Akinpelu, not Boughman, teaches this limitation. It appears that the applicant's are not considering the combination of the references. This argument is invalid since it is incorrect (since Akinpelu teaches this limitation, not Boughman).

5. As to the applicant's arguments with respect to Claims 10, 15, 17, 18, 21, 22, and 24-26 for the examiner allegedly not providing a motivation or suggestion to make the claimed combination obvious in view of the prior art(s), the examiner respectfully disagrees. In the claim rejections below, there is sufficient motivation to combine the references, thus making the claimed invention obvious.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, suggestion to combine the references is found both in the references themselves and in the knowledge generally available to one of ordinary skill in the art. As shown below in exemplary Claim 10's rejection,

“It would have been obvious to one of ordinary skill in the art at the time of invention to take the querying method(s) from Cochrane and Kung and install them into the method of Akinpelu, thereby offering the obvious advantage of determining the best and correct query to perform to get the appropriate data to reduce query impact on the database thereby gaining support for querying other databases from one location.”

Akinpelu, col. 5, 60-65 teaches methods of accessing/querying databases, which includes querying databases from one location. Additionally, combining the reference guarantees that one location, in sending queries, will send valid queries if the databases between the connections happen to use different types of databases requiring different query formats. Also, issuing valid queries not only guarantees system integrity, but when it issues optimized queries based on cost, it also increases the speed of the system making calls connect faster. Therefore, not only is the motivation suggested by the prior art(s), but the motivation is also suggested by knowledge generally available to one of ordinary skill in the art.

6. As to the applicant's arguments with respect to Claims 10 and 25 for the prior art(s) allegedly not disclosing "monitoring integrated service digital network user part [ISDNUP or ISUP] signaling traffic of a carrier for initial address messages," the examiner respectfully disagrees. Akinpelu, col. 3, lines 34-44 with Akinpelu, col. 4, lines 28-59 citings were used in rejection this limitation. The cited sections of Akinpelu teach a test, test 303, that determines if a call is a local or toll call upon the call being placed and a router procedures occurring (Akinpelu, col. 3, lines 51-54). In order to place a call, the connection from the caller must be monitored to determine, for example, when the caller is dialing numbers. For a call to be completed, the call may be routed through many different switches (as shown in Akinpelu, Fig. 1). In order to route calls from one switch to another, messages are sent, identifying the originating carrier/switch and any

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intermediate carriers/switches ("signaling traffic of a carrier for initial address messages") taught in the cited sections above in Akinpelu.

7. As to the applicant's arguments with respect to Claim 18 for the prior art(s) allegedly not disclosing "a gateway comprising a plurality of platforms configured to dynamically load share requests," the examiner respectfully disagrees. Akinpelu, col. 3, lines 23-34 was used to reject this limitation. In the cited section, Akinpelu teaches:

"While Fig. 1 shows individual databases for each local exchange carrier, these databases could be shared among a plurality of such local exchange carriers..."

Akinpelu, at the cited section clearly teaches sharing databases among local exchange carriers. This is sharing data so that overloading of a particular database/platform is avoided and so that additional requests can be serviced in the event of a database being compromised. This is indicated in the fact that the data between the databases is "shared."

8. As to the applicant's arguments with respect to Claim 23 for the prior art(s) allegedly not disclosing "the request is received after the telephone call has been disconnected," the examiner respectfully disagrees. Zebryk, col. 3, lines 15-39 with Akinpelu, col. 4, lines 45-59 sections were cited to teach this limitation. Akinpelu teaches that a request is made to record elapsed time of a call along with other call information, however, Akinpelu does not say that this occurs at the end of a call. Zebryk merely clarifies that this information (elapsed time or call duration) is done after the call is terminated (disconnected). One can also come to the conclusion that in order to record the elapsed time of the call in Akinpelu, one must wait for the call to be

terminated (otherwise the elapsed time/call duration is not known and can not be determined in advance). Zebryk was used in the rejection to merely clarify this point.

9. As to the applicant's arguments with respect to Claim 23 for Zebryk allegedly not disclosing "receiving a request requesting an identification of the local service provider of a caller," (recited in Claim 18) the examiner respectfully disagrees. Zebryk, in the current Office action or in the prior Office action, was not cited as teaching this limitation; therefore, this argument is invalid. Akinpelu was cited in teaching this limitation.

10. The other claims argued merely because of a dependency on a previously argued claim(s) in the arguments presented to the examiner, filed August 22<sup>nd</sup>, 2006, are moot in view of the examiner's interpretation of the claims and art and are still considered rejected based on their respective rejections from the first Office action (parts of recited again below).

### ***Response to Amendment***

#### ***Specification***

11. The specification is objected to because the lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

#### ***Claim Objections***



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12. Claims 18, 21-24, 31, 32, and 37-39 are objected to because of the following informalities:

a. Claim 18 as amended recites "the the" on lines 8-9 and again on line 13. This is a repeated word that appears to be an error in amending the claims. This objection propagates downward through dependent Claims 21-24 and 37-39.

b. Claim 31 recites "a second request to an access routing guide" on lines 1-2. There is no identified corresponding first request in the claims. This objection propagates downward through dependent Claim 32.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 37-39 are each individually rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. Claims 37-39 all recite the limitation "The method" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

18. Claims 1, 9, 28-33, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,570,973 (Boughman et al.).

**Claim 1** can be mapped to Akinpelu as follows: "A method of identifying a local service provider of a caller in response to a telephone call from the caller to a called party, [Akinpelu, col. 2, lines 64-66 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59] the method comprising:

- receiving a request in a first format from a sender for an identity of the caller's local service provider, [Akinpelu, col. 2, lines 64-66 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59] the call having been suspended at a switch of an interexchange carrier; [Akinpelu, col. 4, lines 1-5]

- sending a request in a second format to an LNP database, based on a telephone number of the caller, [Akinpelu, cols. 3-4, col. 53-5] to determine which of a plurality of databases to query; [Akinpelu, col. 3, col. 53-63]
- receiving an identification of a database to query from the LNP database; [Akinpelu, col. 3, col. 53-63]
- determining a message type to send to the identified database to query; [Akinpelu, col. 4, lines 1-11 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33] and
- launching a query to the identified database; [Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33]
- ...sending a notification to the sender, [Akinpelu, col. 6, lines 20-25 with Akinpelu, col. 4, lines 45-59] the notification comprising identifying information of the identified local service provider of the caller [Akinpelu, col. 6, lines 20-25] and whether an agreement exists between the identified local service provider and the interexchange carrier" [Akinpelu, col. 4, lines 45-59].

Akinpelu discloses the above limitation but does not expressly teach:

- "...wherein the interexchange carrier uses the notification to decide whether to connect the suspended call to the called party."

With respect to Claim 1, an analogous art, Boughman, teaches:

- "...wherein the interexchange carrier uses the notification to decide whether to connect the suspended call to the called party" [Boughman, col. 3, lines 29-35 with Boughman, Fig. 2 with Boughman, col. 7, lines 10-14].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Boughman with Akinpelu because both inventions are directed towards the use of telecommunication systems.

Boughman's invention would have been expected to successfully work well with Akinpelu's invention because both inventions use telecommunication systems with databases and customers. Akinpelu discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu does not expressly disclose using the notification to decide whether to connect the suspended call to the called party. Boughman discloses a system and method for toll notification when placing a call comprising notifying the user of whether a toll call is being placed and the MSC (interexchange carrier) deciding from the indication notification from the IN database whether or not to connect the call (based on user interaction or that call status (toll or not toll)).

It would have been obvious to one of ordinary skill in the art at the time of invention to take the notification from Boughman and install it into the method of Akinpelu, thereby offering the obvious advantage of giving the customer an opportunity if they wish to complete the call or not based on the notification or automatically connecting the call if no toll charges will be inflicted (thereby avoiding user frustration).

Akinpelu does not explicitly teach "...receiving an identification of the caller's local service provider from the identified database in response to the query" since the originating caller's originating carrier is identified via a trunk identification or signaling information [Akinpelu, col. 4, lines 47-51] however, it is obvious to one of ordinary skill in

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the art that a caller's local service provider (carrier) is identified in the same manner that the terminating party's local service provider (carrier) is determined since the ANI is transmitted to the interexchange carrier [Akinpelu, col. 4, lines 5-7] and since a telephone number is all that is required to determine the terminating (caller's) party's local service provider [Akinpelu, col. 4, lines 8-11]. Doing so would offer the obvious advantage of verifying the originating carrier through the national database(s). The citations that would support the mapping the limitation above to Akinpelu are "...receiving an identification of the caller's local service provider from the identified database in response to the query" [Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 4, lines 45-59 (with additional focus on Akinpelu, col. 4, lines 47-51) with Akinpelu, col. 4, lines 5-11].

**Claim 9** can be mapped to Akinpelu (as modified by Boughman) as follows: "The method according to claim 1, wherein at least one of the plurality of databases comprises a line information database" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 28** can be mapped to Akinpelu (as modified by Boughman) as follows: "The method according to claim 1, wherein the query comprises a GetData query" [Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 4, lines 45-59 (with additional focus on Akinpelu, col. 4, lines 47-51) with Akinpelu, col. 4, lines 5-11].

**Claim 29** can be mapped to Akinpelu (as modified by Boughman) as follows: "The method according to claim 1, wherein the query comprises an originating line number screening query" [Akinpelu, col. 4, lines 45-67].

**Claim 30** can be mapped to Akinpelu (as modified by Boughman) as follows:

"The method according to claim 1, wherein the query comprises a billed number screening query" [Akinpelu, col. 4, lines 45-67].

**Claim 31** can be mapped to Akinpelu (as modified by Boughman) as follows:

"The method according to claim 1, further comprising sending a second request to an access routing guide to determine which of a plurality of databases to query" [Akinpelu, col. 7, lines 20-25].

**Claim 32** can be mapped to Akinpelu (as modified by Boughman) as follows:

"The method according to claim 31, wherein the access routing guide comprises a line information database (LIDB) access routing guide" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 7, lines 20-25].

**Claim 33** can be mapped to Akinpelu (as modified by Boughman) as follows:

"The method according to claim 1, wherein receiving an identification of the caller's local service provider further comprises receiving an identification of a revenue accounting office, account owner, and billing service provider associated with the telephone number of the caller" [Akinpelu, col. 4, lines 45-67 with Akinpelu, col. 5, lines 13-16 with Akinpelu, col. 5, lines 31-36].

**Claim 36** can be mapped to Akinpelu (as modified by Boughman) as follows:

"The method according to claim 1, wherein the second format comprises an SS7 format" [Akinpelu, col. 7, lines 39-41].

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19. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,570,973 (Boughman et al.), further in view of U.S. Patent No. 6,496,828 (Cochrane et al.).

For **Claim 2**, Akinpelu (as modified by Boughman) teaches: "The method according to claim 1."

Akinpelu (as modified by Boughman) discloses the above limitation but does not expressly teach: "wherein the determining of message type is based upon a cost associated with each of a plurality of available message types."

With respect to Claim 2, an analogous art, Cochrane, teaches: "wherein the determining of message type is based upon a cost associated with each of a plurality of available message types" [Cochrane, col. 8, lines 40-53 with Cochrane, col. 12, lines 17-29].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Cochrane with Akinpelu (as modified by Boughman) because both inventions are directed towards querying databases.

Cochrane's invention would have been expected to successfully work well with Akinpelu (as modified by Boughman)'s invention because both inventions use databases. Akinpelu (as modified by Boughman) discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu (as modified by Boughman) does not expressly disclose determining the message type is based upon a cost associated with each available message types. Cochrane discloses support for summary tables in a

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heterogeneous database environment comprising querying a database by selecting a least cost query for the database being queried.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the querying method(s) from Cochrane and install it into the method of Akinpelu (as modified by Boughman), thereby offering the obvious advantage of determining the best query to perform to get the appropriate data to reduce query impact on the database.

20. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,570,973 (Boughman et al.), further in view of U.S. Patent No. 5,987,452 (Kung).

For **Claim 3**, Akinpelu (as modified by Boughman) teaches: "The method according to claim 1."

Akinpelu (as modified by Boughman) discloses the above limitation but does not expressly teach: "wherein the determining of message type is based upon the message type supported by the identified database."

With respect to Claim 3, an analogous art, Kung, teaches: "wherein the determining of message type is based upon the message type supported by the identified database" [Kung, cols. 6-7, lines 35-3 with Akinpelu, col. 5, lines 60-65].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Kung with Akinpelu (as modified by Boughman) because both inventions are directed towards querying databases used in telephone service.



Kung's invention would have been expected to successfully work well with Akinpelu (as modified by Boughman)'s invention because both inventions use databases. Akinpelu (as modified by Boughman) discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu (as modified by Boughman) does not expressly disclose that the determination of the message type is based upon the message type supported by each of the databases. Kung discloses a query translation system comprising translating a query so that the query can be executed in a different database system.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the query methods from Kung and install it into the method of Akinpelu (as modified by Boughman), thereby offering the obvious advantage of gaining support for querying other databases from one location.

21. Claims 10, 15, 17, 18, 21, 22, 24-26, and 37-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,496,828 (Cochrane et al.), further in view of U.S. Patent No. 5,987,452 (Kung).

For **Claim 10**, Akinpelu teaches: "A method of identifying a local service provider of a caller in response to a telephone call from the caller to a called party, [Akinpelu, col. 2, lines 64-66 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59] the method comprising:

- monitoring integrated services digital network user part signaling traffic of a carrier for initial address messages; [Akinpelu, col. 3, lines 34-44 with Akinpelu, col. 4, lines 28-59]
- sending a request to an LNP database when the monitoring detects the telephone call, [Akinpelu, Fig. 3] based on a telephone number of the caller, [Akinpelu, cols. 3-4, lines. 53-5] to determine which of a plurality of databases to query [Akinpelu, col. 3, lines 53-63]
- receiving an identification of a database to query from the LNP database; [Akinpelu, col. 3, col. 53-63]
- determining a message type in which to query the identified database, [Akinpelu, col. 4, lines 1-11 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33]
- "...launching a query to the identified database" [Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

Akinpelu discloses the above limitations but does not expressly teach:

- "...the determining based on a cost associated with each of a plurality of message types and based upon a message type supported by the identified database."

With respect to Claim 10, an analogous art, Cochrane, teaches:

- "...the determining based on a cost associated with each of a plurality of message types" [Cochrane, col. 8, lines 40-53 with Cochrane, col. 12, lines 17-29 with Akinpelu, col. 5, lines 60-65].

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With respect to Claim 10, an analogous art, Kung, teaches:

- "...and based upon a message type supported by the identified database" [Kung, cols. 6-7, lines 35-3 with Akinpelu, col. 5, lines 60-65].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Cochrane and Kung with Akinpelu because the inventions are directed towards querying databases.

Cochrane's and Kung's inventions would have been expected to successfully work well with Akinpelu's invention because the inventions use databases. Akinpelu discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu does not expressly disclose determining the message type is based upon a cost associated with each available message types and based upon a message type supported by the one of the plurality of databases. Cochrane discloses support for summary tables in a heterogeneous database environment comprising querying a database by selecting a least cost query for the database being queried. Kung discloses a query translation system comprising translating a query so that the query can be executed in a different database system.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the querying method(s) from Cochrane and Kung and install them into the method of Akinpelu, thereby offering the obvious advantage of determining the best and correct query to perform to get the appropriate data to reduce query impact on the database thereby gaining support for querying other databases from one location.

Akinpelu does not explicitly teach "...receiving an identification of the caller's local service provider from the identified database in response to the query" since the originating caller's originating carrier is identified via a trunk identification or signaling information [Akinpelu, col. 4, lines 47-51] however, it is obvious to one of ordinary skill in the art that a caller's local service provider (carrier) is identified in the same manner that the terminating party's local service provider (carrier) is determined since the ANI is transmitted to the interexchange carrier [Akinpelu, col. 4, lines 5-7] and since a telephone number is all that is required to determine the terminating (caller's) party's local service provider [Akinpelu, col. 4, lines 8-11]. Doing so would offer the obvious advantage of verifying the originating carrier through the national database(s). The citations that would support the mapping the limitation above to Akinpelu are "...receiving an identification of the caller's local service provider from the identified database in response to the query" [Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 4, lines 45-59 (with additional focus on Akinpelu, col. 4, lines 47-51) with Akinpelu, col. 4, lines 5-11].

**Claim 15** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The method according to claim 10, wherein the launching is performed during the pendency of the telephone call" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 17** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The method according to claim 10, wherein at least one of the plurality of databases comprises a line information database" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

For **Claim 18**, Akinpelu teaches: “A system for identifying a local service provider of a caller associated with a telephone call from the caller to a called party, [Akinpelu, Figs. 1, 7 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59] the system comprising:

- a gateway comprising a plurality of platforms configured to dynamically load share requests, [Akinpelu, col. 3, lines 23-34] the gateway configured to determine one of a plurality of message types in which to query an identified database [Akinpelu, col. 3, col. 53-55 with Akinpelu, col. 4, lines 1-11 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33] to launch a query to the the identified database” [Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

Akinpelu discloses the above limitations but does not expressly teach:

- “...wherein the gateway determines the message type based upon a cost associated with each of a plurality of available message types and based upon a message type supported by the the identified database.”

With respect to Claim 18, an analogous art, Cochrane, teaches:

- “...wherein the gateway determines the message type based upon a cost associated with each of a plurality of available message types” [Cochrane, col. 8, lines 40-53 with Cochrane, col. 12, lines 17-29 with Akinpelu, col. 5, lines 60-65].

With respect to Claim 18, an analogous art, Kung, teaches:

- “...and based upon a message type supported by the the identified database” [Kung, cols. 6-7, lines 35-3 with Akinpelu, col. 5, lines 60-65].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Cochrane and Kung with Akinpelu because the inventions are directed towards querying databases.

Cochrane's and Kung's inventions would have been expected to successfully work well with Akinpelu's invention because the inventions use databases. Akinpelu discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu does not expressly disclose determining the message type is based upon a cost associated with each available message types and based upon a message type supported by the one of the plurality of databases. Cochrane discloses support for summary tables in a heterogeneous database environment comprising querying a database by selecting a least cost query for the database being queried. Kung discloses a query translation system comprising translating a query so that the query can be executed in a different database system.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the querying method(s) from Cochrane and Kung and install them into the method of Akinpelu, thereby offering the obvious advantage of determining the best and correct query to perform to get the appropriate data to reduce query impact on the database thereby gaining support for querying other databases from one location.

Akinpelu does not expressly teach "the gateway receiving a request requesting an identification of the local service provider of the caller" and "to receive an identification of the local service provider of the caller" since the originating caller's

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originating carrier is identified via a trunk identification or signaling information [Akinpelu, col. 4, lines 47-51] however, it is obvious to one of ordinary skill in the art that a caller's local service provider (carrier) is identified in the same manner that the terminating party's local service provider (carrier) is determined since the ANI is transmitted to the interexchange carrier [Akinpelu, col. 4, lines 5-7] and since a telephone number (ANI) is all that is required to determine the terminating (caller's) party's local service provider [Akinpelu, col. 4, lines 8-11]. Doing so would offer the obvious advantage of verifying the originating carrier through the national database(s). The citations that would support the mapping the limitations above to Akinpelu are "the gateway receiving a request requesting an identification of the local service provider of the caller" and "to receive an identification of the local service provider of the caller" [Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 4, lines 45-59 (with additional focus on Akinpelu, col. 4, lines 47-51) with Akinpelu, col. 4, lines 5-11].

**Claim 21** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The system according to claim 18, wherein the request is received prior to the telephone call being connected to the called party" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 22** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The system according to claim 18, wherein the request is received during the pendency of the telephone call" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 24** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The system according to claim 18, wherein the identified database comprises a line information database" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 25** encompasses substantially the same scope of the invention as that of Claim 10, in addition to a computer readable medium and some code for performing the method steps of Claim 10. Therefore, Claim 25 is rejected for the same reasons as stated above with respect to Claim 10.

**Claim 26** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The computer readable medium according to claim 25, wherein at least one of the plurality of databases comprises a line information database" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 37** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The method according to claim 18, wherein the request is received after the call has been connected to the called party and before the call has been disconnected" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 38** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The method according to claim 18, the identified database having been identified as a result of a request sent to an LNP database and a request sent to an access routing guide" [Akinpelu, col. 6, lines 25-33 with Akinpelu, col. 7, lines 20-25].



**Claim 39** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The method according to claim 38, wherein the access routing guide comprises a line information database (LIDB) access routing guide" [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 40** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The method according to claim 10, the monitoring further comprising monitoring initial address messages relating to casually dialed calls"[Akinpelu, col. 4, lines 29-44 with Akinpelu, cols. 7-8, lines 39-6].

**Claim 41** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: "The computer readable medium according to claim 25, the monitoring further comprising monitoring initial address messages relating to casually dialed calls" [Akinpelu, col. 4, lines 29-44].

22. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,496,828 (Cochrane et al.) in view of U.S. Patent No. 5,987,452 (Kung), further in view of U.S. Patent No. 4,975,942 (Zebryk).

For **Claim 23**, Akinpelu (as modified by Cochrane and Kung) teaches: "The system according to claim 18."

Akinpelu (as modified by Cochrane and Kung) discloses the above limitation but does not expressly teach: "wherein the request is received after the telephone call has been disconnected."

With respect to Claim 23, an analogous art, Zebryk, teaches: "wherein the request is received after the telephone call has been disconnected" [Zebryk, col. 3, lines 15-39 with Akinpelu, col. 4, lines 45-59].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Zebryk with Akinpelu (as modified by Cochrane and Kung) because both inventions are directed towards the use of telecommunication systems.

Zebryk's invention would have been expected to successfully work well with Akinpelu (as modified by Cochrane and Kung)'s invention because both inventions use telecommunication systems with databases and customers. Akinpelu (as modified by Cochrane and Kung) discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu (as modified by Cochrane and Kung) does not expressly disclose launching a query after the telephone call. Zebryk discloses a credit/calling card pay telephone method and system employing telephone unit local card-checking and other intelligence cooperative with local personal host computer comprising recording call information after the call has terminated.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the notification from Zebryk and install it into the method of Akinpelu (as modified by Cochrane and Kung), thereby offering the obvious advantage of accurately recording call records of Akinpelu (as modified by Cochrane and Kung).

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23. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,570,973 (Boughman et al.), further in view of "RFC 3331" (RFC3331).

For **Claim 34**, Akinpelu (as modified by Boughman) teaches: "The method according to claim 1."

Akinpelu (as modified by Boughman) discloses the above limitation but does not expressly teach:

- "...wherein the first format comprises a text format."

With respect to Claim 34, an analogous art, RFC3331, teaches:

- "...wherein the first format comprises a text format" [RFC3331, p. 14, parameter value 3 with Akinpelu, col. 7, lines 39-41].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of RFC3331 and Akinpelu (as modified by Boughman) before him/her to combine RFC3331 with Akinpelu (as modified by Boughman) because both inventions are directed towards SS7 signaling.

RFC3331's invention would have been expected to successfully work well with Akinpelu (as modified by Boughman)'s invention because both inventions use SS7. Akinpelu (as modified by Boughman) discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database. However, Akinpelu (as modified by Boughman) does not expressly disclose that text (or ASCII text) is contained within SS7 messages. RFC3331 discloses the MTP2 part of SS7 signaling comprising text being used in the signal.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of RFC3331 and Akinpelu (as modified by Boughman) before him/her to take the text from RFC3331 and install it into the invention of Akinpelu (as modified by Boughman), thereby offering the obvious advantage of having interface identifiers not only being defined as numbers, but also letters.

**Claim 35** can be mapped to Akinpelu (as modified by Boughman and RFC3331) as follows: "The method according to claim 1, wherein the first format comprises a ASCII text" [RFC3331, p. 14, parameter value 3 with Akinpelu, col. 7, lines 39-41].

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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**Conclusion**

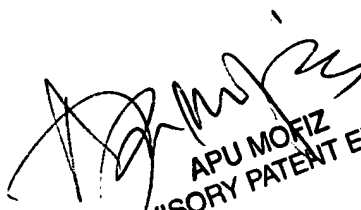
25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent S. Stace whose telephone number is 571-272-8372 and fax number is 571-273-8372. The examiner can normally be reached on M-F 9am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu M. Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brent Stace

*bs*

  
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